

App. Serial No 10/596,450
NL031496US1

REMARKS

Claims 1-10 are currently pending in the patent application. For the reasons and arguments set forth below, Applicant respectfully submits that the claimed invention is allowable over the cited references.

The instant Office Action dated July 5, 2007 indicated an objection to the disclosure, objections to claims 1-4, and listed the following rejections: claims 1-10 stand rejected under 35 U.S.C. 102(b) over Noda *et al.* (U.S. Patent No. 6,432,802) and : claims 1-10 stand rejected under 35 U.S.C. 102(b) over Mili-Strkalj *et al.* (U. S. Patent No. 6,080,630).

As addressed below, Applicant traverses these rejections because no discernible rationale has been presented. Upon review by Applicant, these references do not appear to bear any meaningful correspondence.

Applicant respectfully traverses the Section 102(b) rejections of claims 1-10. The Office Action has failed to comply with 35 U.S.C. § 132, in that the Office Action fails to provide sufficient detail regarding the alleged correspondence between the claimed invention and the cited references to enable Applicant to adequately respond to the rejections. As a first example, the Office Action cites to numerous Figures and essentially the entire detailed description of the Noda reference (*i.e.*, columns 7-14, lines 1-67) without providing any specific correspondence for numerous claim limitations including, for example, those directed to first and second annealing processes. The cited portions of Noda (*i.e.*, columns 7-14, lines 1-67) contain discussion relating to four different embodiments, of which each mentions multiple (different) annealing steps (*e.g.*, embodiment 1 refers to at least four different annealing steps). Thus, Applicant is unable to ascertain the portion of the Noda reference that the Office Action is relying upon.

As a second example, the Office Action cites to numerous Figures and essentially the entire detailed description of the Mili-Strkalj reference (*i.e.*, columns 4-9, lines 1-67) without providing any specific correspondence for numerous claim limitations.

As a third example, the Office Action's entire assertion of correspondence between the cited references and the dependent claims 2-10 consists of citing numerous Figures and then repeating selected claim limitations. Applicant is left to guess as to

App. Serial No 10/596,450
NL031496US1

what parts of the cited references the Office Action is asserting as allegedly corresponding to these claims.

In view of the above, the Section 102(b) rejections of claims 1-10 are improper and Applicant requests that they be withdrawn. Should any rejections based upon the Mili-Strkalj or Noda references be maintained, Applicant respectfully requests that the Office Action specifically identify which portions of these references allegedly correspond to the claimed invention. In this light, Applicant has reviewed the cited references and attempted to address the rejections below.

Applicant respectfully traverses the Section 102(b) rejection of claims 1-10. The cited portions of the Noda reference do not correspond to the claimed invention which includes aspects that seem to have been overlooked. For example, such aspects are directed to amorphous silicon being kept present in a surface region of the semiconductor body in between the performing of two annealing processes. The Office Action has not identified any annealing step taught by Noda as corresponding to the two claimed annealing processes. Applicant has reviewed the Noda reference and cannot identify any portion of Noda that teaches keeping amorphous silicon present between the performance of the two annealing processes. More specifically, the Noda reference teaches that an annealing process changes the amorphous layer, existing in the semiconductor substrate 100, into a crystalline layer. A subsequent annealing process is then performed, thereby forming pocket dopant diffused layer 106. *See, e.g.*, Col. 7:16-36. Thus, the cited portions of Noda do not appear to teach keeping amorphous silicon present between the performance of the two annealing processes that form pocket dopant diffused layer 106. Accordingly, the Section 102(b) rejection of claims 1-10 based upon the Noda reference is improper and Applicant requests that it be withdrawn.

Applicant further traverses the rejection of dependent claims 2-10 because the Office Action has not shown correspondence to various claim limitations. As a first example, the cited portions of Noda do not mention implanting inert ions to re-introduce amorphous silicon into the semiconductor body between the performance of the two annealing processes as in claim 3. Secondly, the cited portions of Noda do not mention that any annealing process is performed at a temperature between 550 to 650 °C as in claim 6.

App. Serial No 10/596,450
NL031496US1

Applicant respectfully traverses the Section 102(b) rejection of claims 1-10 because the Office Action's assertion of correspondence between the cited portions of the Mili-Strkalj reference and the claimed invention is illogical. For example, the Office Action asserts that Mili-Strkalj's self-compensating regions (212a and 212b) and pocket 222 allegedly correspond to the extensions of the source/drain regions and the pocket region, respectively, of the claimed invention. However, Mili-Strkalj teaches that the self-compensating regions (212a and 212b) diffuse laterally to form pocket 222. *See, e.g.,* Col. 5:42-48. Thus, Mili-Strkalj does not teach that the self-compensating regions (212a and 212b) are extensions of source/drain regions (218 and 220) or that the pocket 222 is formed below the self-compensating regions (212a and 212b) as in the claimed invention.

Moreover, the cited portions of the Mili-Strkalj reference do not correspond to the claimed invention which includes, for example, directed to amorphous silicon being kept present in a surface region of the semiconductor body in between the performing of two annealing processes. The Office Action has not identified any annealing step taught by Mili-Strkalj as corresponding to the two claimed annealing processes. Applicant has reviewed the Mili-Strkalj reference, which appears to teach a single annealing step relating to the formation of pocket 222 and that this annealing step may be performed in one of two manners. *See, e.g.,* Col. 5:42-53 and Col. 8:19-34. In addition, a word search of the Mili-Strkalj reference fails to identify any mention of the word amorphous or any mention of keeping amorphous silicon present between the performance of the two annealing processes.

In view of the above, the Section 102(b) rejection of claims 1-10 based upon the Mili-Strkalj reference is improper and Applicant requests that it be withdrawn. Applicant further traverses the rejection of dependent claims 2-10 because the Office Action has not shown correspondence to various claim limitations. As a first example, the cited portions of Mili-Strkalj do not mention implanting inert ions to re-introduce amorphous silicon into the semiconductor body between the performance of the two annealing processes as in claim 3. Secondly, the cited portions of Mili-Strkalj do not mention that any annealing process is performed at a temperature between 550 to 650 degrees C as in claim 6.

App. Serial No 10/596,450
NL031496US1

Regarding the Office Action's suggestion to add headings, Applicant respectfully declines because the indicated suggestions in 37 C.F.R. § 1.77(b) are not statutorily required for filing a non-provisional patent application under 35 USC § 111(a), but per 37 C.F.R. § 1.51(d) are only guidelines that are suggested for applicant's use but are not mandatory. In fact, when Rule 77 was amended in 1996 (61 FR 42790, Aug. 19, 1996), Bruce A. Lehman, Assistant Secretary of Commerce and Commissioner of Patents and Trademarks, stated in the Official Gazette:

"Section 1.77 is permissive rather than mandatory. ... 1.77 merely expresses the Office's preference for the arrangement of the application elements. The Office may advise an applicant that the application does not comply with the format set forth in 1.77, and suggest this format for the applicant's consideration; however, the Office will not require any application to comply with the format set forth in 1.77."

In view of the above, Applicant prefers not to add section headings. Moreover, the lack of section headings does not mean that any sections have been omitted from the disclosure. Applicant submits that the Background of the Invention and a Brief Summary of the Invention are present in the disclosure. Accordingly, Applicant requests that the objection to the disclosure be removed.

Regarding the Office Action's statement that "There is no figures 7, 8 in the specifications" (*see* page 3 of the instant Office Action), any possible relevance of this statement is unclear to Applicant. Thus, Applicant respectfully requests clarification regarding this statement.

In response to the objections to claims 1-4 based upon the lack of clear antecedent basis, Applicant notes that explicit antecedent basis is not required. *See* M.P.E.P. § 2173.05(e). Regarding the claim 1 language "the implanted pocket region" and the claim 4 language "the formation of the implanted pocket region", Applicant submits that antecedent basis can be found in claim 1 at line 10 (*i.e.*, "the pocket region (7) is formed by implanting"). Applicant has made minor amendments to claims 1-4 in an effort to facilitate prosecution, as is indicated on pages 2-3 of this paper. Therefore, Applicant requests that the objections to claims 1-4 be removed.

App. Serial No 10/596,450
NL031496US1

In view of the remarks above, Applicant believes that each of the rejections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, Peter Zawilski, of NXP Corporation at (408) 474-9063 (or the undersigned).

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